

conditions have developed in certain portions, with *Vaccinium macrocarpon*, *Calopogon pulchellus*, *Rhus Vernix*, and *Sphagnum* as common inhabitants. *Crotalaria*, however, was found in somewhat drier ground, among outlying small specimens of *Robinia viscosa*, a plant which has formed a dense thicket with small outlying specimens yearly appearing.

All these plants I have found belong to the St. Lawrence basin, which, however, is not far from the Mississippi basin, both being in Lake Co. It seems to me that these specimens have migrated in a natural manner, arriving in the localities after the ground has become favorable. Specimens have been sent to the Gray Herbarium.—EDWIN D. HULL, Gary, Indiana.

THE GEOGRAPHIC SEGREGATION OF *MONARDA FISTULOSA* AND ITS VAR. *MOLLIS*.—True *Monarda fistulosa* L. has the veinlets of the lower surfaces of the younger leaves strigose-hirsute with elongate trichomes; *M. mollis* L., whether considered a distinct species or as a variety of *M. fistulosa*, has the lower surfaces only minutely puberulent to glabrescent, at most with very short hairs. In their *Review of the Genus Monarda* in Univ. Calif. Pub. Bot. xx. no. 2: 147–194 (1942) McClintock & Epling merge the two as one species, not even separating them as varieties; and they have diligently placed upon nearly 200 sheets in the Gray Herbarium of var. *mollis* (L.) Benth.¹ or *M. mollis* L. labels stating that these plants are all *M. fistulosa*. Now it so happens that such close students of our eastern mints as Bentham, Gray, Watson, Wiegand & Eames, Deam and many others, none of them “splitters,” have regularly recognized var. *mollis* as fairly distinct; and certainly in its natural range it is much more

¹ The bibliographic references to this plant, under *M. fistulosa*, in the recent *Review* would have gained by careful checking. The references as given there are: “*M. mollis* L., Amoen, Acad. 3: 390, 1764” and “*M. fistulosa* var. *mollis* L., Sp. Pl., ed. 2, 2: 32, 1762.” In the Stockholm (original) issue of *Amoenitates Academicæ* the description of *M. mollis* is in vol. iii. p. 399 (not 390); and, according to Pritzel, this volume was published in 1756 (not 1764). Furthermore, it is clear that Linnaeus did not make the combination *M. fistulosa*, var. *mollis*, wrongly ascribed to him. Looking up the reference given by McClintock & Epling, to “L., Sp. Pl. ed. 2, 2: 32” one finds that vol. 2 follows without repaging the numbering of pages of vol. 1. The first page of vol. 2 is 785; the last in vol. i, p. 784. In vol. i (not “2”), on p. 32 Linnaeus, as was his frequent custom, treated the *M. mollis* of Amoen, Acad. as an unnamed variety of *M. fistulosa*: “β. *Monarda mollis*. Amoen. acad. 3. p. 399.” He did not give a varietal name. The varietal combination was first and correctly made by Bentham, *Labiat. Gen. Sp.* 317 (1833).

common and wide-spread than the plant with long trichomes on the lower leaf-surfaces. The latter has been in cultivation and in some areas is obviously a waif from such introduction. In southwestern Maine, for instance, true *M. fistulosa* is only a garden-escape, but var. *mollis* is indigenous at the borders of dry woods or in dry thickets. Taking the representation before me, I get for apparently indigenous plants the following scores: from Maine typical *M. fistulosa* 0, var. *mollis* 10; from New Hampshire 0 and 9; from Vermont 2 and 16; from eastern Massachusetts (east of the Connecticut) 3 and 29; from Connecticut 6 and 16; from upland Virginia 11 and 1; from upland North Carolina 9 and 3; from Illinois 1 and 14; from Iowa 0 and 5; from Oklahoma 0 and 10. If one applies a reading-glass to McClintock & Epling's map 8 he will note that true *M. fistulosa*, "spreading hairs only", indicated by a solid triangle, is recorded chiefly along the Appalachian Upland, from central-western Massachusetts to the mountains of western North Carolina and eastern Tennessee. That is, as it has generally been understood, most typical *M. fistulosa*. Some sheets before me give it a slightly broader range but, surely, var. *mollis*, usually without any striking transition in pubescence of leaves, is by far the more widely dispersed and generally commoner extreme of the species.

M. FISTULOSA L., var. **menthaefolia** (Graham), comb. nov.
M. menthaefolia Graham in Edinb. New Phil. Journ. 387 (1829).
M. mollis, var. *menthaefolia* (Graham) Fernald in RHODORA, iii. 15 (1901).

Var. *menthaefolia* is the chief representative of *Monarda fistulosa*, var. *mollis* in the Great Plains and Rocky Mountain regions, extending eastward to Manitoba and Minnesota and distinguished by its stiffer and mostly simpler and lower stems and shorter-petioled leaves, the normal responses to a more arid climate and soil. I am quite unable to follow Rydberg, Nelson, McClintock & Epling and others who maintain it as "a species of the Rocky Mountains ranging into Texas south of New Mexico" (a novel way of saying south to Trans-Pecos Texas), the range given by the latter authors in their key (their p. 157); neither were Bentham, Gray and some other earlier students of the group, who even gave up trying to separate var. *menthaefolia* from var. *mollis*. On the whole it is a reasonably good geographic

variety, ranging, as actually cited and mapped by McClintock & Epling, to the northern tip of Vancouver Island at the west, to the border of Minnesota at the east. In the eastern part of its range it passes insensibly into var. *mollis* and various specimens in the Gray Herbarium labelled by the recent reviewers of the genus as *M. menthaefolia* are inseparable from others marked by them as *M. fistulosa*.—M. L. FERNALD.

THE VALIDITY OF LITHOSPERMUM LATIFOLIUM.—In the Report of the State Botanist of New York for 1921, House treats *Lithospermum latifolium* Michx. Fl. Bor.-Am. i. 131 (1803) as a later homonym and proposes, N. Y. State Mus. Bull. no. 243-244: 61 (1923), a new combination for it:

Lithospermum luteum (Raf.) comb. nov.

- L. latifolium* Michx. Fl. Bor. Am., I: 131. 1803. Not Forsk. 1775
Cyphorina latifolia Raf. Am. Mo. Mag., 4: 191. 1819
Cyphorina lutea Raf. Cat. 13. 1824
L. lutescens N. Coleman, Cat. Pl. Grand Rapids. 29. 1874

Passing for the moment the fact that Rafinesque's proposed genus was *Cyphorima*, the most important point is House's belief that Forskål published a species *Lithospermum latifolium* in 1775. To be sure, this name was given by Jackson in Index Kewensis, under *Lithospermum*: "*latifolium*, Forsk. Fl. Aegypt. Arab. 39 = *callosum*"; but this seems to be one of the hundreds of cases where those who worked on Jackson's great bibliographic undertaking "put one over on him". Search in two copies of Forskål shows no *L. latifolium*; he had 5 species of that genus, *L. hispidum* (p. 38), *L. heliotropioides* (p. 39), *L. ciliatum* (p. 39), *L. angustifolium* (p. 39) and *L. digynum* (p. 40). There is no *L. latifolium* but the last phrase on the page, following the habitat, "In desertis Káhirinis", and the Arabic name, is "Characteres *Lithosp. Purp. caer. sed nec repens, neque latifolium*". The last line ends halfway across the bottom of the page and its final "*latifolium*" evidently caught the eye of the tired indexer. Wondering how Jackson got the clew that the supposed *L. "latifolium, Forsk."* of Index Kewensis was the same as *L. callosum*, said by Jackson to grow in "Am. bor.; Peruv.", we